§761.60(b)(5) Abandonment and Disposal of Natural Gas Pipeline Systems

§761.60(b)(5)(i) Abandonment

Q: ***A company plans to abandon a section of pipe that is a dead end line. The pipe has no sources, but does have drips. Neither the pipe nor the drips have ever been tested for PCBs, nor have any liquids ever been removed from the pipe. The pipe may be filled with water due to leakage. Testing done upstream detected no PCBs. What is required for abandonment?***

A: Pipe that contains <50 ppm PCBs is not regulated for disposal, including abandonment. There is no need to test for PCBs if the system has never shown evidence of PCB contamination. As long as the natural gas pipeline system upstream has never had PCBs ≥50 ppm and there are no sources, then testing is not necessary.

Q: ***A local natural gas utility company has historical information showing PCBs <50 ppm in its distribution system and drip liquids. A subsequent testing program using wipe tests of the entire distribution area (incoming interconnect feeds, area loops and the internal surfaces of low-lying pipe) shows PCBs <50 ppm. Is this information satisfactory for characterization of the area piping network? Does the local distribution company have to ensure that all liquids are drained from abandoned pipe or can it just cap the ends and abandon the pipe in place?***

A: Until the abandonment occurs, the pipe is technically "in use" and the regulations at §761.30(i) apply. At the time of abandonment, if there is no reason to believe that PCBs are present in the system, then there is no reason to test. There is no requirement to test under §761.60(b)(5). However, there is a requirement to determine if your natural gas pipeline system is subject to the PCB disposal regulations. If you choose not to test, and the pipe is later discovered to be regulated, you will be in violation of the regulations. If the pipe contains PCBs <50 ppm, then the pipe should be abandoned according to best management practice. If the pipe contains PCBs ≥50 ppm, then the pipe should be abandoned according to §761.60(b)(5), which requires the removal of free flowing liquids, except for the provision in §761.60(b)(5)(i)(D).

Q: ***A company purchased property, prior to August 28, 1998, that had an abandoned pipe, sealed at both ends. There was documentation that PCBs were <50 ppm. What must the company do to comply with the Disposal Amendments?***

A: Since the pipe has already been abandoned prior to the effective date of August 28, 1998, the new rule does not apply as it is prospective.

Q: ***In §761.60(b)(5)(i), what is meant by "sealing ends"? What was the intent and how permanent does the sealing need to be? The normal practice for this company is to cap with plastic caps and secure with duct tape. If a pipe is grouted they use a more permanent method such as welding.***

A: The intent was to permanently keep things from entering and exiting the pipe. There was no specific method required, but best management practice should be applied to prevent releases and exposure and to keep your liability at a minimum. EPA would consider both welding metal caps to metal pipes and sealing plastic caps to plastic pipe with the glue used to join pipe as permanent options, but would not consider plastic caps secured with duct tape as an acceptable option.

Small Diameter Pipe

Q: Does small diameter pipe that contains PCBs have to be characterized before abandonment?

A: No, characterization is not required for small diameter pipe, i.e., pipe having a nominal inside diameter of ≤four inches. (See §761.60(b)(5)(i)(A).) However, if the pipe is in use before the abandonment takes place, then all applicable requirements under §761.30(i) need to be followed, including characterization.

Leaking of abandoned pipe

Q: How does EPA plan to deal with pipe abandoned before August 28, 1998 if the pipe is later found to leak liquids with a PCB concentration ≥50 ppm?

A: If the pipe leaks liquids with a PCB concentration ≥50 ppm, then it is considered a spill and the waste from the spill needs to be cleaned up under §761.61.

§761.60(b)(5)(ii) Removal with subsequent action

Decontamination

Q: What method may I use to decontaminate gas pipeline to the standard for unrestricted use in §761.79(b)(3)(i)(A)?

A: You may use any decontamination method specified in §761.79(b), provided confirmatory sampling is done in accordance with Subpart P to verify that the standard for non-porous surfaces, ≤10 ug/100 cm^2, has been met. You may also use the decontamination methods in §761.79(c)(3) or (4) or §761.79(h), per §761.60(b)(5)(i)(D).

Q: A company plans to decontaminate natural gas pipe to ≤10ug/100cm^2 using §761.79(b)(3). Decontamination under this paragraph also requires confirmatory sampling in accordance with Subpart P. Can the company use Subpart M instead of Subpart P, as Subpart M was specifically written for wipe sampling natural gas pipe?

A: In this situation, if the company wants to use Subpart M in place of Subpart P, they should apply for an alternate sampling approval under §761.79(h)(3). This requires submitting a letter to the EPA Regional Administrator requesting the use of Subpart M in place of

Subpart P. §761.79(h)(3) outlines what information is required in this application. Until the application is approved by the EPA Regional Administrator, Subpart M cannot be used.

Storage for disposal

Q: What are the physical requirements for storage of dry PCB pipe for disposal?

A: Store dry pipe in accordance with §761.65. Dry pipe may be treated as remediation waste and stored temporarily in accordance with §761.65(c)(9).

§761.60(b)(5)(iii) Characterization of natural gas pipeline systems by PCB concentration in condensate

Historical records

Q: Can historical records be used to establish PCB concentration for pipeline abandonments or disposal?

A: No. Historical data may not be used for purposes of abandonment or removal of natural gas pipeline systems containing ≥50 ppm PCBs under §761.60(b)(5). Section 761.60(b)(5)(iii) provides the characterization requirements for abandonment or removal of natural gas pipeline. Under this section, you must collect samples within 72 hours after the last transmission of gas through the system when abandoning pipe, or after the last transmission of gas through the system when removing the pipe for disposal.

Q: A particular pipeline system has an "indicator" of PCBs. If an oil-like sludge is present in this system, then the system will most likely contain PCBs. If there is no sludge, then there are usually no PCBs present in this system. Approximately 300 drips have been tested and they have found no PCBs in the pipeline system. Additionally, there is no oil-like sludge present. The pipeline system contains no sources. Can this historical data and generator knowledge be used to avoid sampling for use and abandonment?

A: The idea behind requiring sampling for use authorization was to sample successively if you had a PCB hit or you knew there were PCBs in the system. Under §761.30(i)(1)(iii)(A)(5), you must do successive sampling until PCBs are <50 ppm for two consecutive testings, with a minimum interval of 180 days between tests. However, in this particular case, if your test results show that there are no PCB sources ≥50 ppm in the system, then there is no reason to sample.

For abandonment, sample if you believe there may be PCBs ≥50 ppm in the system. Even if PCBs were ≥50 ppm, depending on which option is chosen, you may not need to sample. If sampling is required, then you must characterize the natural gas pipeline system in accordance with §761.60(b)(5)(iii).

Sampling

Q: ***What is the sampling requirement when abandoning pipe?***

A: According to §761.60(b)(5)(iii), if there are liquids present, then characterize the pipe based on the concentration of PCBs in the organic condensate. However, if there are no liquids present, then you must do a wipe sample in accordance with Subpart M (§761.250). For abandonment of pipe, §761.250(b) requires that, at a minimum, all ends of all sections of pipe be sampled. Section 761.250(b)(1) and (2) provide sampling procedures for pipe in specific locations. Section 761.250(b)(3) provides a sampling procedure to collect samples in addition to those that are required. This procedure is optional.

Q: ***Section 761.60(b)(5)(iii) addresses characterization of pipe by the concentration of the condensate. What do you do if you can't get to the pipe within 72 hours of the last transmission of gas? For example, how does this apply to an old piece of pipe? Are there any contingencies?***

A: This provision was intended to help provide a more accurate concentration of PCBs in the condensate. The longer the PCBs remain in the pipe after the last transmission of gas, the more likely it is that the PCBs will concentrate, increasing the concentration of the PCBs in the condensate. If organic liquids are present, the liquids should be collected within 72 hours of the final transmission of natural gas through the pipeline system. If there are no free flowing liquids present, a wipe sample should be taken after the final transmission of natural gas through the pipeline system. In most cases, it should be known well in advance that a pipeline system will be abandoned or removed for disposal. Therefore, it should not be difficult to comply. If it is an emergency abandonment or removal and it is not possible to sample the condensate in the pipe within 72 hours, please contact the Office of Enforcement for information on compliance. Also, if you are dealing with an old piece of pipe, please contact the Office of Enforcement.

Q: ***For large pipes in excess of 4 inch nominal interior diameter, are there limits on the length of pipe to be tested and to be abandoned under §761.60(b)(5)?***

A: There are no restrictions on the length of pipe for abandonment or testing for abandonment.

Q: ***How many samples must I take for abandoned pipe?***

A: At a minimum, §761.250(b) requires you to sample all ends of all pipeline sections. Under §761.250(b)(3), there are procedures for selecting other locations if additional sampling is desired.

Q: ***How can appurtenances removed from a pipeline be characterized for disposal if the pipeline is not tested?***

A: Natural gas pipeline systems, which include appurtenances, must be characterized based on the concentration of PCBs in the organic condensate (§761.60(b)(5)(iii)). If there are no liquids present in the appurtenance, then the appurtenance could be disposed of as PCB remediation waste under §761.61. Section 761.61(b)(2)(ii) allows decontamination in accordance with §761.79. Under §761.79(b)(3)(i)(A) you may use Subpart P to sample and characterize the appurtenance. Additionally, you may submit an alternate sampling plan under §761.61(c) or §761.79(h).

Q: ***How is a short section of greater than four inch diameter gas pipeline tested for disposal? For instance, for a 30 foot section of eight inch pipe, the seven samples called for in §761.247 of Subpart M seem excessive.***

A: Under §761.60(b)(5)(ii), there are several options to dispose of the pipe, and only one of these options requires sampling for PCB contamination, disposal of PCB-Contaminated pipe. If you choose this option, then under §761.247, if you only have one pipe segment (a pipe segment can be up to 40 feet in length), you only need one sample. If you have more than one segment however, you need more than one sample. As an alternative to the Subpart M sampling procedure, you may request a risk-based sampling approval under §761.61(c).

Q: ***When disposing of natural gas pipe pursuant to §761.60(b)(5)(ii)(A)(1), is it acceptable to characterize the pipe using only samples from organic liquids collected at condensate liquid collection points, or must the concentration be determined in accordance with Subpart M?***

A: Characterize the pipe in accordance with §761.60(b)(5)(iii). Characterize pipe using the organic liquids collected at condensate collection points. If no liquids are present, collect wipe samples in accordance with Subpart M.

Q*:** ***A 320 foot segment of pipe will be removed for disposal. PCBs are present in the system, but the level of contamination is unknown. The system slopes, so there are no liquids present. A wipe test will be done to determine the level of PCBs. If the result is $\leq$ ***10*** μ***g/100 cm***^{2}***, is the pipe regulated? For this 320 foot segment, do you have to apply the sampling method in §761.247?***

A: The sampling method for disposal of natural gas pipeline systems is in §761.247. Once you have sampled the pipeline segment, you may use §761.257 in order to determine the regulatory status of the sampled pipe segment. If the wipe test result is $\leq$10 ug/100 cm^2, then the pipe is not regulated for disposal under §761.60(b)(5). Since you know the system contains PCBs, it may be more beneficial to forego sampling and just assume the entire system contains PCBs $\geq$50 ppm, and dispose in accordance with §761.60(b)(5)(ii)(B). Otherwise, you must use the method in §761.247 to sample the pipe or apply for a risk-based alternative sampling approval under §761.61(c).

Q*:** ***Do the regulations permit wipe sampling of small diameter pipe, with a diameter of 4

inches or less?

A: The regulations do not include a protocol for wipe sampling small diameter pipe. All comments that were received regarding this issue stated that it was difficult, if not impossible, to wipe sample pipe with a diameter of 4 inches or less. These commenters stated that other options should be made available. There were no comments requesting wipe sampling of small diameter pipe. Information received by EPA shows that it is difficult to obtain enough constant pressure when sampling these small pipes. Thus, the results are not consistent. If you want to wipe sample small diameter pipe, you must apply for an alternate sampling method under §761.61(c) (or under §761.79(h) if you plan to dispose of the pipeline by decontaminating it).

Q: If I sample a main line and find no PCBs, may I assume that all of the service lines that come off of it are also non-PCB?

A: No, not necessarily. When characterizing a pipe under §761.30(i) or §761.60(b)(5), the PCB level in the condensate is assumed to extend only to the next liquid collection point downstream. Thus, further characterization may be necessary.

Q: If I have only one liquid collection point that I sample within 72 hours of the last gas transmission and find it is $\geq$50 ppm, may I wipe sample other sections of pipe below that point and remove those sections for disposal based on a lower concentration, if it is $\leq$10 μg/100 cm^2? Along a length of 5000 feet of pipe, there are no other liquid collection points to sample below the one that is $\geq$50 ppm.

A: Under §761.60(b)(5)(iii), you must characterize natural gas pipeline based on the concentration of PCBs in the organic condensate. Therefore, if there are liquids present, even just at one collection point, the pipeline must be characterized based on that sample. The only way you could use a wipe sample in this situation is if you submit an alternate sampling plan under §761.61(c) (or under §761.79(h) if you plan to dispose of the pipeline by decontaminating it).

<u>Porous surfaces</u>

Q: A company needs to abandon some old pipe that contains all porous surfaces. These porous surfaces are not due to the thin porous coating used to prevent corrosion and there are no liquids present. When sampling pipe for abandonment does one need to be concerned with the presence of porous surfaces?

A: Yes. You must characterize a natural gas pipeline system by analyzing organic liquids collected at the condensate collection points (see §761.60(b)(5)(iii)). If there are no liquids present you must wipe sample in accordance with Subpart M, §761.250(a)(2). Select the proper sampling position along the pipe by following the directions in §761.247 (c) and (d). Then, according to §761.247(c)(3)(iii), if the entire population of pipe to be wipe sampled is porous and there are no non-porous surfaces available, assume that the

pipe contains PCBs ≥50 ppm but <500 ppm and is PCB-Contaminated. Subsequently, an appropriate provision in §761.60(b)(5)(i) must be used to abandon the pipe. If you do not want to assume that the pipe is PCB-Contaminated, then you may apply for an alternate sampling plan under §761.61(c).

§761.60(b)(5)(iv) Disposal of pipeline liquids

Q: ***Section 761.60(b)(5)(iv)(B) allows gas pipeline liquids containing PCB concentrations of <50 ppm to be burned for energy recovery per §761.20(e). Can this waste be disposed of rather than burned for energy recovery? Is it subject to storage, marking, and manifest requirements if the PCB concentration is <50 ppm?***

A: The waste can be disposed of as a non-PCB waste since it is <50 ppm. The waste is not subject to the storage, marking, and manifest requirements for PCB waste when it is <50 ppm.

Q: ***Do you need a manifest in order to transport pipeline liquids with PCBs to a consolidation site before disposal?***

A: No, you do not need a manifest if you are transporting the liquids to your own property or a "related company", for purposes of consolidation. The consolidation site would not be a "Commercial storer of PCB waste" under the definition at §761.3, since the storage activities do not involve waste generated by others.